

SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: T-12
PRODUCT SYNONYM(s): Bleaching Clay
CAS NUMBER: Mixture
RECOMMENDED USE: Adsorbent, Filtration
SUPPLIER/MANUFACTURER'S NAME: **Carbon Chemistry Ltd.**
ADDRESS: 6155 S Main St, Suite 280, Aurora, Colorado 80016
BUSINESS PHONE: +1 (888) 446-8421
EMERGENCY PHONE: 24 HR. EMERGENCY TELEPHONE NUMBERS
CHEMTREC: CCN832309 (800) 424-9300
DATE OF PREPARATION: May 21, 2022
DATE OF LAST REVISION: November 6, 2021

SECTION 2 - HAZARDS IDENTIFICATION

Classification of the mixture

This product does not meet the definition of a hazardous substance or preparation as defined by 29 CFR 1910.1200 and WHMIS 2015.

Component(s) Contributing to Classification(s)

None applicable

GHS Label elements, including precautionary statements

Pictogram(s):

None Applicable

Signal Word:

None Applicable

GHS Hazard Classification(s):

None Applicable

Hazard Statement(s):

None Applicable

Prevention Statement(s):

None Applicable

Response Statement(s):

None Applicable

Storage Statement(s):

None Applicable

Disposal Statement(s):

None Applicable

Other Hazards

The product contains less than 0.1% w/w RCS (respirable crystalline silica) as determined by the SWERF method. The respirable crystalline silica content can be measured using the "Size - Weighted Respirable Fraction – SWERF" method. All details about the SWERF method is available at www.crystallinesilica.eu

Depending on the handling and use (grinding, drying, bagging), airborne respirable dust may be generated. Dust contains respirable crystalline silica. Prolonged and or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable dust should be monitored and controlled. The product should be handled using methods and techniques that minimize or eliminate dust generation.

SAFETY DATA SHEET

SECTION 3 - COMPOSITION and INFORMATION ON INGREDIENTS

CHEMICAL NATURE: Bentonite, acid-leached is a UVCB substance, sub-type 4. The purity of the product is 100 % w/w.
Impurities are not applicable for a UVCB substance
CAS#: 70131-50-9

All ingredients are non-hazardous or below applicable cut-off levels.

SECTION 4 - FIRST-AID MEASURES

Description of first aid measures

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and SDS to health professional with contaminated individual.

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation persists.

SKIN CONTACT: Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder before re-use.

INHALATION: If exposed to excessive levels of dust or fumes, remove to fresh air and get medical attention. Get medical attention if cough and other symptoms develop. If you feel unwell, seek medical advice (show the label where possible).

INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

Most important symptoms and effects, both acute and delayed

Dust may cause mechanical eye irritation.

Medical conditions aggravated by exposure:

This material or its emissions may aggravate pre-existing disorders involving any target organs mentioned in this Safety Data Sheet as being at risk.

Indication of immediate medical attention and special treatment needed

Treat symptoms and reduce over-exposure.

SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing media

Water, Dry powder / dry sand, alcohol-resistant foam, dry chemical or CO₂.

Specific hazards arising from the chemical

The product is not flammable. Does not sustain combustion. No hazardous decomposition products are known.

Explosion Sensitivity to Mechanical Impact:

Not Sensitive.

Explosion Sensitivity to Static Discharge:

Not Sensitive.

Minimum Ignition Energy (M.I.E.):

No Data at this time

Special firefighting Procedure

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Small Spill:

Sweep or vacuum material. Transfer to secondary container to be properly disposed.

SAFETY DATA SHEET

Large Spill:

Ensure adequate ventilation.
Avoid dust formation.
Evacuate personnel to safe areas.
Avoid contact with skin, eyes and clothing.
Wear personal protective equipment.
Avoid breathing dust.
Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).
Special sliding risk through leaking of spilled product in connection with water.
Avoid dust formation; avoid dry sweeping
Use vacuum suction unit, or shovel into bags.

Environmental precautions

No special environmental precautions required.

Methods and material for containment and cleaning up

Pick up and transfer to properly labelled containers. If product is released from trucks in roads, place signposts and remove the spill using vacuum cleaning systems. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

SECTION 7 - HANDLING and STORAGE

General Procedures:

Wash hands before breaks and at the end of workday.

Handling:

Avoid dust formation. Provide sufficient air exchange and/or exhaust in work rooms. In case of insufficient ventilation, wear suitable respiratory equipment. For personal protection see section 8. Handle and open container with care.
If you require advice on safe handling techniques or specific uses, please contact your supplier or check the further information referred to in section 16.

Storage:

Minimize airborne dust generation and prevent wind dispersal during loading and unloading. Keep containers closed and store packaged products so as to prevent accidental bursting. Store in a dry place.

Specific end uses

Adsorbent, filtration.

SECTION 8 - EXPOSURE CONTROLS - PERSONAL PROTECTION

Control parameters**EXPOSURE LIMITS/GUIDELINES:****PARTICULATES NOT OTHERWISE REGULATED RESPIRABLE FRACTION**

	<u>TWA</u>		<u>TWA</u>
OSHA	5 mg/m ³	NOM 010 STPS 2015	3 mg/m ³

PARTICULATES NOT OTHERWISE REGULATED TOTAL DUST

	<u>TWA</u>		<u>TWA</u>
OSHA	15 mg/m ³	NOM 010 STPS 2015	10 mg/m ³

Exposure Controls

Currently, International exposure limits are established for the components of this product. Please check with competent authority in each country for the most recent limits in place.

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below. Use local exhaust ventilation to control airborne dust. Ensure eyewash/safety shower stations are available near areas where this product is used.

SAFETY DATA SHEET

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above, if applicable.

If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses are required. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.

HAND PROTECTION: Use protective gloves as appropriate to minimize skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.

BODY PROTECTION: Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Information on basic physical and chemical properties

PHYSICAL STATE:	Solid (powder, granular)
ODOR:	Odorless
ODOR THRESHOLD (PPM):	Not Available
APPEARANCE / COLOR:	Bright to earthy powder
pH:	>2-8.6
MELTING / FREEZING POINT (F°):	> 450 °C Method: EU A.1
BOILING POINT (F°):	Not Applicable
FLASH POINT (F°):	Not Applicable
EVAPORATION RATE (nBuAc = 1):	Not Available
FLAMMABILITY (solid, gas):	Does not ignite Method: EU A.10
FLAMMABLE LIMITS (in air by volume, %):	Not explosive Burning number 1
VAPOR PRESSURE (mmHg):	Not Applicable
VAPOR DENSITY (AIR=1):	Not Applicable
RELATIVE DENSITY	Not Available
SOLUBILITY IN WATER (%)	<0.9 g/l (at 20 °C)
PARTITION COEFFICIENT: N-OCTANOL/WATER:	Not Applicable
AUTOIGNITION TEMPERATURE:	Method: 92/69/EEC, A.6. no relative self-ignition temperature below 400 °C
DECOMPOSITION TEMPERATURE:	Not Applicable
VISCOSITY:	Not Applicable
EXPLOSIVE PROPERTIES:	Not Applicable
OXIDISING PROPERTIES:	No oxidizing properties (Based on the chemical structure, the substance does not contain a surplus of oxygen or any structural groups known to be correlated with a tendency to react exothermally with combustible material)

Other Information

SPECIFIC GRAVITY 4°C: (Water = 1)	Not Available
DENSITY:	2.6 g/cm ³
VOC:	Not Applicable
WEIGHT PER GALLON:	Not Applicable

SECTION 10 - STABILITY and REACTIVITY

Reactivity: Stable under recommended storage conditions.

Chemical Stability: Product is stable under recommended storage conditions.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: Forms slippery/greasy layers with water.

SAFETY DATA SHEET

Incompatible materials: Inert, not reactive. Avoid storing together with materials that may be affected by dust.

Hazardous Decomposition Products: No data available.

SECTION 11 - TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

TOXICITY DATA:

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 50 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

POTENTIAL HEALTH HAZARDS OR RISKS FROM EXPOSURE:

IRRITANCY OF PRODUCT: Exposure with this product can be irritating to exposed eyes.

SENSITIZATION OF PRODUCT: This product is not considered a skin sensitizer.

CARCINOGENICITY: Ingredients within this product are not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be, nor suspected to be, cancer-causing agents by these agencies.

GERM CELL MUTAGENICITY INFORMATION: This product does not contain components which are documented as Germ Cell Mutagenicity hazards.

REPRODUCTIVE TOXICITY INFORMATION: This product does not contain components which are documented as reproductive hazards.

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: No specific data available for this product.

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: No specific data available for this product.

ASPIRATION HAZARD This product is not anticipated to be an aspiration hazard.

SECTION 12 - ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

Toxicity

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Test Type: static test Analytical monitoring: no Method: OECD Test Guideline 202 GLP: no Remarks: The details of the toxic effect relate to the nominal concentration.
Toxicity to algae	:	EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l End point: Growth rate Exposure time: 72 h Test Type: static test Analytical monitoring: no Method: OECD Test Guideline 201 GLP: no Remarks: The details of the toxic effect relate to the nominal concentration.
Toxicity to microorganisms	:	EC50 (activated sludge of a predominantly domestic sewage): > 1,000 mg/l End point: Bacteria toxicity (respiration inhibition) Exposure time: 3 h Test Type: aquatic Analytical monitoring: no data available Method: OECD Test Guideline 209 GLP: yes Remarks: The details of the toxic effect relate to the nominal concentration.

SAFETY DATA SHEET

Persistence and degradability

No specific data available on this product.

Bioaccumulative potential

No specific data available on this product.

Mobility in soil

No specific data available on this product.

Results of PBT and vPvB assessment

No specific data available on this product.

Other adverse effects

No specific data available on this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL: Can be disposed of as solid waste in a suitable installation subject to the Environmental Protection (Duty of Care) Regulations. Avoid dust formation. Where possible recycling is preferred to disposal or incineration.

COMMENTS: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional/local authority requirements.

SECTION 14 - TRANSPORTATION INFORMATION

US DOT/IMDG/IATA:

PROPER SHIPPING NAME: Not Regulated

HAZARD CLASS NUMBER and DESCRIPTION: N/A

UN IDENTIFICATION NUMBER: N/A

PACKING GROUP: N/A

DOT LABEL(S) REQUIRED: N/A

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2016): N/A

MARINE POLLUTANT: Ingredients are not classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B)

SECTION 15 - REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

UNITED STATES REGULATIONS

SARA REPORTING REQUIREMENTS: This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act.

TSCA: All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.

SARA 311/312:

Acute Health: No Chronic Health: No Fire: No Reactivity: No

U.S. CERCLA REPORTABLE QUANTITY (RQ):

CERCLA Reportable Quantity RQ: None

CLEAN WATER ACT:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

STATE REGULATIONS: None.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product does not contain chemicals on the Prop 65 list.

CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: All of the components of this product are on the DSL Inventory

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: This product is categorized as per WHMIS 2015 Hazardous Product Regulations.

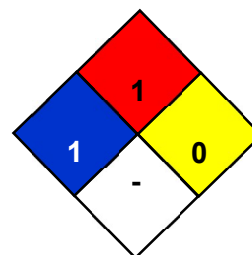
SAFETY DATA SHEET

SECTION 16 - OTHER INFORMATION

HMIS RATING

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

NFPA RATING



Caution: HMIS and NFPA ratings are based on a 0-4 rating scale

0= Minimal Hazard, 1= Slight, 2= Moderate, 3= High, 4= Extreme

GENERAL STATEMENTS:

Key or Legend to abbreviations and acronyms

AIHA	- American Industrial Hygiene Association
ACGIH	- American Conference of Governmental Industrial Hygienists
CASRN	- Chemical Abstract Services Registry Number
CFR	- Code of Federal Regulations
D.O.T.	- United States Department of Transportation
IARC	- International Agency for Research on Cancer
OSHA	- Occupational Safety and Health Administration
NIOSH	- National Institute for Occupational Safety and Health
NTP	- National Toxicology Program
PPM	- Parts per million
mg/m ³	- milligram per cubic meter
kg	- kilogram
L or l	- Liter
n.o.s.	- not otherwise specified
Lbs.	- Pounds
mm ² /s	- millimeters squared per second
PMCC	- Pensky-Martens Closed Cup
LC50	- Lethal Concentration 50 (concentration in water having a 50% chance of causing death to aquatic life)
EC50	- Effective Concentration that causes 50% inhibition in growth or mobilization
OECD	- Organization for Economic Cooperation and Development
SOCMI	- Synthetic Organic Chemical Manufacturing Industry
VOC	- Volatile Organic Compound

PREPARED BY: Chris Eighbrett

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November 24, 2019	- Address update
January 8, 2021	- Updated classification
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END OF SDS

Page 7 of 7